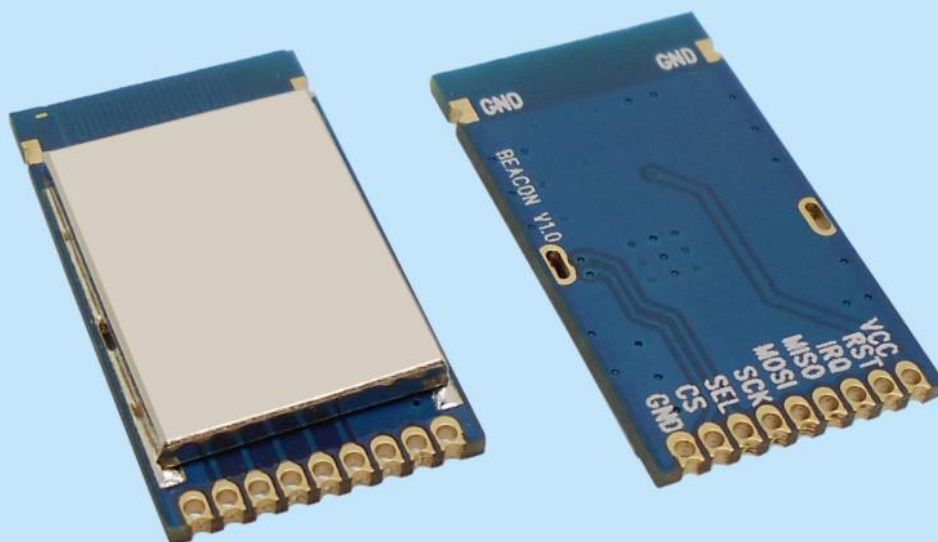


Small size embedded beacon RF module
Support Bluetooth protocol

Product Specification



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Note: Revision History

Revision	Date	Comment
V1.0	2016-12	First release
V1.1	2017-06	Logo updated

1. Overview

Beacon128 is a low-voltage, low-power, fully-integrated, Bluetooth / Low Energy (BLE) RF Module, It features a low-power physical layer, a link layer with an embedded security engine, a Host/Controller Interface (HCI), and a powerful power management which allows operation using efficiently 3V batteries.

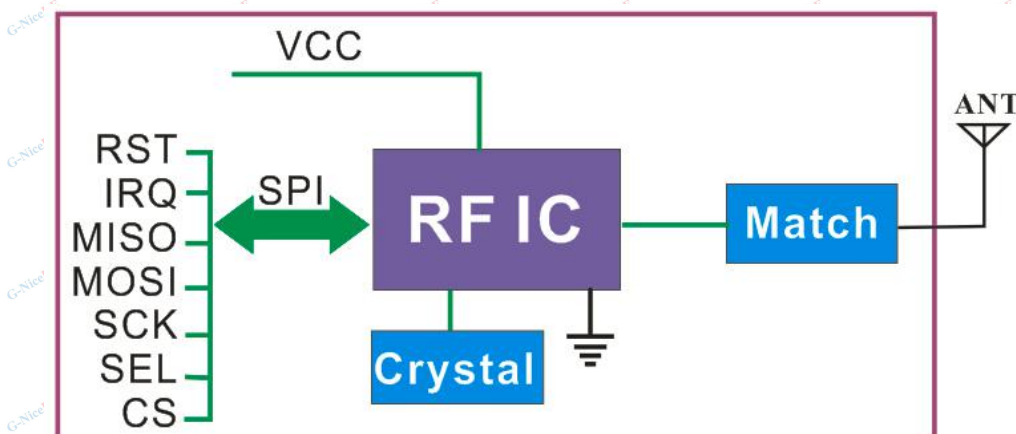
2. Feature

- Master and slave BLE controller compliant to Bluetooth specification V4.0
- 3V battery
- Based on widely-spread, low-cost 26MHz quartz
- 1Mbps on-air data rate
- Programmable RF output level from -18dBm to +3dBm to optimize current consumption for a wide range of applications
- Supply Voltage Level Detector (SVLD) function enables monitoring the battery charge condition

3. Application

- Wireless Mouse
- Wireless health sports products
- commodity information push
- Remote control
- Alarm security system
- Wireless ranging system

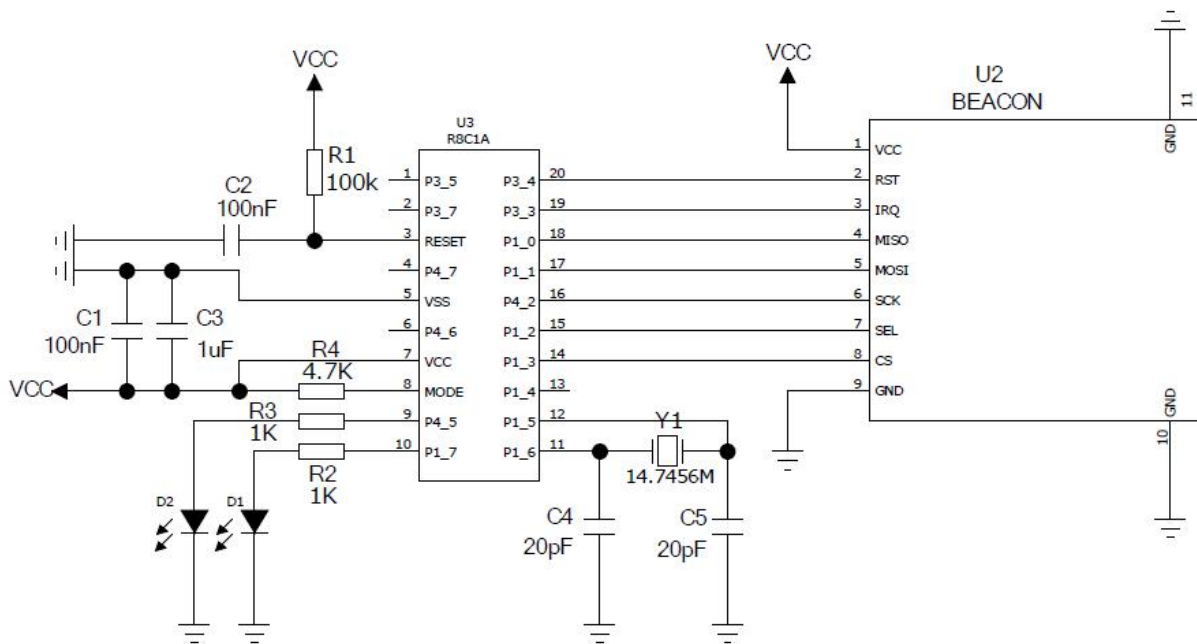
4. Block Diagram



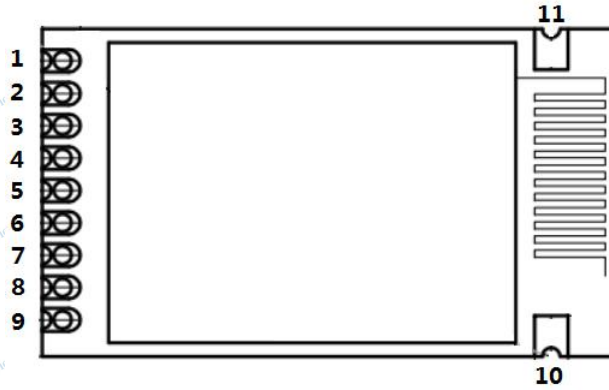
5. Electrical Characteristics

Parameters	Min	Typ.	Max.	Unit	condition
Working condition					
Voltage range	2.3	3.3	3.6	V	
Operating Temperature	-40	25	85	°C	
Current consumption					
Rx current		12		mA	@3.3V
Tx current		12.9		mA	@3.3V
Sleep current		20		uA	
RF parameters					
Frequency range	2.4		2.484	GHZ	
Tx power	-18		+ 4	dBm	@2.4V
RF rate		1M		bps	

6. Application circuit



7. Pin definition



Pin No.	Definition	Description
1	VCC	Connected to the positive power supply
2	RST	Reset, low level effective
3	IRQ	SPI Interrupt Request
4	MISO	data output for SPI
5	MOSI	data Input for SPI
6	SCK	SPI clock input (SCK)
7	SEL	Interface selection (0=UART; 1=SPI)
8	CS	chip select
9、10、11	GND	Connected to ground

8. Mechanical dimension

